

II.—*Notices of British Fungi*. By the Rev. M. J. BERKELEY, M.A., F.L.S., and C. E. BROOME, Esq., F.L.S.

[Continued from vol. xi. p. 349.]

[Plates I. & II.]

1402. *Agaricus* (*Lepiota*) *cinnabarinus*, Fr. Ep. ed. 2, p. 36.

This very fine species was sent from New Pitsligo, Aberdeenshire, by the Rev. J. Fergusson.

1403. *A.* (*Armillaria*) *subcavus*, Schum.; Fr. Ep. ed. 2, p. 46.

Cirencester, Nov. 1873, Miss Broadwood. An entirely white variety.

**A.* (*Tricholoma*) *lascivus*, Fr. Ic. tab. 38. fig. 1.

Forres, Rev. J. Keith. A specimen, certainly belonging to this species, was brought to Hereford by Mr. Renny, with decidedly decurrent gills.

1404. *A.* (*Tricholoma*) *panæolus*, Fr. Ic. tab. 36. fig. 2.

Street, Somersetshire, J. A. Clark, Esq. Stem longer than usual.

1405. *A.* (*Tricholoma*) *pædidus*, Fr. Ic. tab. 46. fig. 1.

Abergavenny, J. Renny; Wollaston, Norths., Miss Hume.

1406. *A.* (*Clitocybe*) *diatretus*, Fr. Ep. ed. 2, p. 104.

Coed Coch. Gathered at the same time with *A. fragrans*, from which it was at once distinguished by the total absence of the peculiar odour of that species.

1407. *A.* (*Clitocybe*) *angustissimus*, Fr. Ic. tab. 59. fig. 2.

In woods. Ascot, 1873.

1408. *A.* (*Collybia*) *muscigenus*, Schum.

Coed Coch, 1873.

1409. *A.* (*Collybia*) *ambustus*, Fr. Ic. tab. 70. fig. 2.

On burnt earth. Kew; Coed Coch.

1410. *A.* (*Mycena*) *galericulatus* v. *calopus*, Fr. Ic. tab. 80. fig. 2.

On blocks of wood in a fernery. Coed Coch, 1872. Extremely beautiful.

1411. *A.* (*Mycena*) *ætites*, Fr. Ic. tab. 81. fig. 5.

Ascot, 1873.

1412. *A.* (*Omphalia*) *philonotis*, Lasch.; Fr. Ic. tab. 76. fig. 1.

On *Sphagnum*. Glamis, Rev. J. Stevenson.

1413. *A.* (*Omphalia*) *umbelliferus*, L., var. *abiignus*.

In considerable numbers on a very decayed fir-stump. Pale yellow. Coed Coch, 1873.

**A. (Pleurotus) septicus*, Fr.

In great numbers on a turf of *Salix polaris* from Spitzbergen in a greenhouse in the Botanic Garden at Cambridge.

**A. (Pluteus) parvulus*, Weinm.

A very minute form occurs on the soil of garden-pots in stoves, with a transparent, minutely tomentose stem; volva white, silky.

**A. (Entoloma) placenta*, Batsch.

Glamis, Rev. J. Stevenson, April 20, 1874. Exactly the plant of Batsch.

1414. *A. (Entoloma) resutus*, Fr.

Pastures. Glamis, Rev. J. Stevenson, no. 380.

1415. *A. (Nolanea) icterinus*, Fr.

Edensor, J. Renny, Esq. Exactly according with a figure from Fries.

1416. *A. (Nolanea) caelestinus*, Fr.

M. Terry, Esq., Oct. 1872.

1417. *A. (Hebeloma) Bongardii*, Weinm. Fl. Russ. p. 190.

Growing in large quantities on the Culbin sand hills, near the Findhorn mouth, G. Norman.

**A. (Flammula) scambus*, Fr.

On an old stump. Moccas, Herefordshire, 1873.

**A. (Flammula) inopus*, Fr.

On decayed stumps of fir or larch, Hereford, J. Renny. Ascot, 1873. The specimens agree exactly with Bolton's figure, which was previously the only authority for the species being British.

1418. *A. (Hypholoma) storea*, Fr.

This curious species occurred last year at the base of different trees at Ascot and at Coed Coch; and it has also been found by Mr. W. G. Smith, and was exhibited at South Kensington, October 1873. It is considered very rare by Fries; but it is probably one of those species which are abundant in some one year, and are not found again for a generation.

1419. *A. (Hypholoma) elaeodes*, Fr.

Slough, M. Terry, Esq., 1873.

1420. *Hygrophorus fornicatus*, Fr.

Holme Lacy, Moccas Park, Herefordsh.; Batheaston, 1873.

1421. *Cantharellus albidus*, Fr. Fl. Dan. tab. 1293.

Coed Coch, Sept. 1872, and in the same spot, Oct. 1873. Exactly agreeing with the figure in 'Flora Danica.'

1422. *C. Stevensoni*, B. & Br. Pileo orbiculari umbilicato, pallido glabro; margine inflexo; stipite cylindrico, subtiliter pulverulento albo dein obscuriore; lamellis decurrentibus pallidis antice fuscatis.

On very rotten wood amongst moss. Glamis, Rev. J. Stevenson, March and April 1874.

Pileus about 2 lines across; stem $\frac{1}{4}$ inch high, $\frac{1}{2}$ line thick, with a little white mycelium at the base. Very near to *C. cupulatus*; but that is very strongly umbonate when young, and the umbo is always visible at the bottom of the umbilicus; the habitat, moreover, is different.

1423. *Lentinus scoticus*, B. & Br.; Fr. Ep. ed. 2, p. 485. Inodorus; pileo glabro hygrophano multiformi, reniformi expanso; stipite omnino obsoleto, brevi vel longo deorsum fusco-vestito, plerumque umbilicato; margine lobato sinuato; lamellis dentatis decurrentibus; mycelio repente fusco.

On decayed *Ulex* and rotten wood. Glamis, Rev. J. Stevenson; Menmuir, Rev. M. Anderson.

Inodorous or, at any rate, without any odour of aniseed; extremely variable; pileus $\frac{1}{2}$ – $1\frac{1}{2}$ inch broad, smooth, hygrophanous, pallid, at length brownish, either quite stemless and reniform, or variously stipitate, solitary or caespitose, sometimes deeply umbilicate, lobed at the margin, and sinuate or plicate; stem, when present, varying from 2 lines to as many inches; gills rather distant, strongly toothed, decurrent when the stem is developed. Very rarely two pilei are joined. The nearest ally to this curious species is *Lentinus omphalodes*.

1424. *Boletus sulfureus*, Fr.

This fine species was found in great abundance on sawdust at Forres by the Rev. J. Keith.

1425. *B. areus*, Bull.

Surrey, M. Terry, Esq.

Spores oblong, oblique at the base, $\cdot 0004$ – $\cdot 0005$ inch long, $\cdot 0002$ wide.

1426. *B. carnosus*, Rostk.

Stoke Pogis, M. Terry, Esq.

**Polyporus lentus*, B.

On *Ulex*. Glamis, Rev. J. Stevenson, no. 58.

1427. *P. floccopus*, Rostk. St. Deutschl. Fl. no. 28, tab. 13.

On dead wood. Glamis, Rev. J. Stevenson.

1428. *P. trabeus*, Fr.

Glamis, Rev. J. Stevenson; Menmuir, Rev. M. Anderson..

1429. *P. borealis*, Fr.

Slough, M. Terry, Esq.

1430. *P.* (Anodermei) *Keithii*, B. & Br. Conchatus; pileo rubro-fusco, processibus dentiformibus hispido; hymenio pallido; dissepimentis laceratis.

On dead wood. Forres, Rev. J. Keith.

About $\frac{1}{2}$ inch across; conchiform, stemless, decurrent behind,

bright red-brown, rough, with rigid processes; hymenium pallid; dissepiments lacerated.

1431. *P. callosus*, Fr.

On dead wood. Glamis, Rev. J. Stevenson.

1432. *P.* (Resupinati) *collabefactus*, B. & Br. Strato glaberrimo corticioideo; poris primum e subiculo collabendo excavatis brevibus; margine obtuso.

On dead wood. Glamis, Rev. J. Stevenson.

The barren parts resemble exactly a very smooth *Corticium* after the fashion of *C. calceum*; the pores seem first to arise from the mere collapsing of the substance, always shallow; margin obtuse.

1433. *P.* (Resupinati) *Rennyi*, B. & Br. Subiculo crasso, pulvinato, pulverulento; poris parvis, elongatis; dissepimentis tenuibus.

On wood, and running on to the ground. Hereford, J. Renny, Nov. 1873; Glamis, Rev. J. Stevenson.

Forming a thick, at first somewhat frothy, then pulverulent mass, white, turning to lemon-coloured when dry; pores sparingly produced, white, elongated. A very singular species.

1434. *P.* (Resupinati) *blepharistoma*, B. & Br. Totus resupinatus, niveus; mycelio arachnoideo subfarinoso; poris parvis; dissepimentis tenuibus; margine ciliato-dentatis.

On dead wood. Glamis, 1874.

Very thin and delicate; the ciliato-dentate margin of the pores is very elegant.

1435. *Hydnum squamosum*, Fr. Ep. ed. 2, p. 598.

Exhibited by W. G. Smith at the Fungus show, South Kensington, Oct. 1873. A very interesting addition to the British flora.

1436. *H. melleum*, B. & Br. Melleum, effusum, tenue; margine subtiliter byssoideo; subiculo dentibusque, apice acutis quandoque divisus, deorsum pulverulentis, medio nudis.

On broken rails lying on the ground. Coed Coch, 1873.

1437. *H. Stevensoni*, B. & Br. Album, effusum, subtus farinaceum, hic illic byssaceum; aculeis cylindricis, obtusis vel truncatis quandoque compressis, apice pulverulentis.

Glamis, Rev. J. Stevenson, March 1874.

1438. *H. anomalum*, B. & Br. Pallide flavum; strato tenui gelatinoso; dentibus primum granuliformibus, dein stipitatis sursum obtuse divisus.

In the inside of a very rotten ash tree. Near Langridge, Somersetshire, C. E. B., March 9, 1872.

Substance of teeth tough, with large ovate or globose vesicles immersed in it; spores globose, shortly pedicellate.

Resembles externally Corda, Anleit. fig. 71 ; but the substance is very different. Near to Fries's genus *Mucronella*.

PLATE I. fig. 1. *a.* plant, slightly magnified ; *b.* horizontal section ; *c.* spores, both more highly magnified.

1439. *Radulum tomentosum*, Fr. Ep. ed. 2, p. 624.

On *Pyrus aucuparia*. Menmuir, Rev. M. Anderson.

1440. *R. deglubens*, B. & Br. Orbiculare, ferrugineum, subdiaphanum ; tuberculis erectis, subcylindricis, irregularibus, sparsis ; interstitiis lævibus, e sporis albis pulverulentis.

On ash, Jan. 30, 1874. Forres, Rev. J. Keith ; New Pit-sligo, Rev. J. Fergusson. About $\frac{1}{3}$ inch across.

1441. *R. corallinum*, B. & Br. Effusum, album ; subiculo nitido tenuissimo pelliculoso ; tuberculis fasciculatis deorsum divisis, obtusis, coralloideis.

Scotland. Effused for 3 inches over oak-branches partially covered with lichens ; fascicles of tubercles $\frac{1}{4}$ inch or more across.

1442. *R. epileucum*, B. & Br. Effusum, ochroleucum, totum resupinatum ; subiculo niveo, strato ceraceo tecto ; tuberculis sparsis cylindricis, apice sub lente fimbriatis deciduis.

On decorticated wood. Glamis, Rev. J. Stevenson. Effused for several inches ; tubercles falling out and showing the white mealy subiculum, round which is an annular depression.

1443. *Grandinia crustosa*, P. ; Fr. Ep. ed. 1, p. 528.

On *Polyporus versicolor*. Glamis, Rev. J. Stevenson, Feb. 1874.

1444. *Kneiffia subgelatinosa*, B. & Br. Tenuis e subflavo cremicolor ; granulis minutis subgelatinosis, apice fimbriatis.

On stumps of felled firs. Glamis, Rev. J. Stevenson, April 1874. Accompanied by a green alga, which penetrates the tissue of the fungus.

1445. *Craterellus clavatus*, Fr. Ep. ed. 1, p. 533.

In a beech wood. Bisham, Berks, Rev. G. H. Sawyer.

1446. *Cyphella fraxinicola*, B. & Br. Minuta, orbicularis extus nivea breviter villosa ; disco flavo e sporis fuscescente, profifero.

On ash. Batheaston, Dec. 20, 1873.

1447. *Hyphelia rosea*, Fr.

New Pit-sligo, Rev. J. Fergusson.

Spores minute, globose.

1448. *Clavaria curta*, Fr.

On the ground. Coed Coch, Holme Lacy.

* *Clavaria tuberosa*, Sow.

On sticks. Forres, Rev. J. Keith.

Exactly the long-lost plant of Sowerby, which is perhaps

too near *C. ardenia*; and possibly the same may be said of *C. juncea*, notwithstanding the great difference of size.

**Hydnangium carneum*, Wallr.

This has occurred lately to Dr. Dickson at Edinburgh about the roots of *Eucalyptus*.

Spores $\cdot 013$ – $\cdot 014$ inch in diameter.

1449. *Leptostroma glechomatidis*, B. & Br. Maculis fulvis; peritheciis irregularibus, minutis, epiphyllis.

On leaves of ground-ivy. Scotland.

Spores minute, oblong.

1450. *Leptothyrium pictum*, B. & Br. Maculis rufis hic illic pallidioribus, fertilibus fusco marginatis; peritheciis nitidis ocellatis; sporis subcymbæformibus curvulis.

On leaves of *Lonicera*. Glamis, Rev. J. Stevenson. A very pretty and distinct species.

**L. Juglandis* occurred abundantly last year on the green coat of walnuts; on examination the spores were just those in Madame Libert's specimens on walnut-leaves. Spores $\cdot 0008$ inch long, but not (as she says) ellipsoid.

1451. *Stilbum cuneiferum*, B. & Br. Stipite sursum parce ramoso, vel simplici; capitulis ovatis; sporis cuneiformibus.

On rotten cabbage-stalks. Batheaston, April 1873. Mentioned in Rabenh. no. 1662, as mixed with *Periconia brassicæcola*.

Stems attenuated upwards, simple, or slightly divided, consisting of compacted threads, which are free above and bear the obversely wedge-shaped, pale greenish-brown spores, which are $\cdot 0004$ – $\cdot 00045$ inch long. Habit that of *S. rigidum*.

PLATE I. fig. 2. a. plant *in situ*, slightly magnified; b. tip, more highly magnified; c, d. spores.

1452. *Periconia brassicæcola*, B. & Br. Sporibus irregularibus, ovatis, pallide brunneis, utroque apice plus minus attenuato.

Forming dense masses in the inside of rotten cabbage-stalks. Batheaston, April 1873.

Stem black; heads globose, at first grey, then black; spores $\cdot 0002$ – $\cdot 0004$ inch long, cinereous.

PLATE I. fig. 3. a. plant *in situ*; b. portion of the head; c. portion of the stem; d. spores. All more or less highly magnified.

1453. *P. Phillipsii*, B. & Leight. Minutissima; stipite sursum attenuato; capitulo globoso; sporibus globosis, granulatis.

Trefriw, Rev. W. A. Leighton, 1874. On soil with a minute species of *Thelocarpon*.

Stem about equal in height to the diameter of the head, thick for the size of the plant; spores $\cdot 0004$ inch in diameter.

Looks at first sight like a little *Sphinctrina*. So minute that it is quite invisible to the naked eye.

1454. *Peronospora calotheca*, De By.

On *Galium aparine*. Forden, April, Rev. E. Vyse.

1455. *P. interstitialis*, B. & Br. Maculis luteis, a venis limitatis; floccis brevissimis, flexuosis; sporis ovatis terminatis.

On leaves of primrose. Glamis, Rev. J. Stevenson; Menmuir, Rev. M. Anderson.

Spots hypophyllous, yellow, confined to the interstices of the veins, or very rarely extending slightly beyond them; spores often seated obliquely, .0006–.0007 inch long. Allied to *P. obliqua*, Cooke.

1456. *P. rufibasis*, B. & Br. Maculis epiphyllis nitidis fulvis; hypophyllis pallidis; sporophoris linearibus; sporis obovatis elongatisve variis, oblique sitis, brevissime pedicellatis.

On leaves of *Myrica gale*. Glamis, Rev. J. Stevenson.

The spots on the upper surface of the leaves are very conspicuous. Closely allied to *P. obliqua* and the last. Spores very variable in length.

1457. *Penicillium megalosporum*, B. & Br. Niveum, breve; floccis fasciculatis; sporis globosis elongatisque lævibus.

In an old chicken-coop. Menmuir, Rev. M. Anderson.

Spores .0005–.001 inch in diameter, or equally variable when oblong.

**Fusarium minutulum*, Cd.

On rotten boards. St. Catherine's, Bath, Jan. 5, 1874.

Spores .0002 inch long.

1458. *Cylindrosporium rhabdospora*, B. & Br. Maculis amphigenis, orbicularibus, brunneis; sporis albis radiantibus, oblongis, triseptatis, obtusis, utrinque paululum excavatis.

On leaves of *Plantago*. Glamis, Rev. J. Stevenson.

Spores forming little radiating fascicles, oblong, slightly hollowed out at the sides, .0008–.002 inch or more long. Sometimes a second is developed at the tip of the first.

**C. ficariae*, B.

Common on leaves of *Ranunculus ficaria*.

This is placed by Cooke in *Glæosporium*; but the spores are not contained in a perithecium. *Cylindrosporium concentricum*, Grev., is, on the contrary, a true *Glæosporium*, and is not uncommon on cabbage-leaves.

1459. *C. niveum*, B. & Br. Maculis fusco marginatis; sporis niveis, oblongis, uniseptatis, breviter pedicellatis.

On *Caltha palustris*. New Pitsligo, Rev. J. Fergusson.

Spots numerous, crowded, one or two lines across, often confluent; spores oblong, uniseptate, when fully grown about .002 inch long.

1460. *Septoria hyperici*, Desm. Ann. d. Sc. Nat. 1842, v. 17, p. 110.

Glamis, Rev. J. Stevenson.

Spores $\cdot 002$ inch long.

1461. *S. stachydis*, Desm. l. c. 1847, v. 8, p. 19.

On leaves of *Stachys sylvatica*. Glamis, Rev. J. Stevenson.

Spores slender, thread-like, $\cdot 001$ – $\cdot 0015$ inch long.

1462. *Melanconium elevatum*, Cd.

On oak. Langridge, Dec. 1872, C. E. B.

Spores $\cdot 0005$ inch long.

1463. *Pestalozzia funerea*, Desm.

On dead *Cupressus macrocarpa*. Hatton, near Hounslow.

1464. *Puccinia Andersoni*, B. & Br. Maculis orbicularibus, brunneo cinetis; soris hypophyllis minutis congestis; sporis oblongis, centro constrictis, obtuse apiculatis.

On the underside of leaves of *Cnicus heterophyllus*. Falls of Noran, Glen Ogle, June 1874, Rev. M. Anderson.

Spots visible only on the upperside, orbicular, surrounded by a brown border, and a central patch indicating the position of the minute crowded sori, which are almost concealed by the pubescence of the leaf; spores very like those of *P. discoideum* as figured by Corda. This was originally found at the Den of Airlie by Mr. Gardiner.

1465. *P. Fergussoni*, B. & Br. Maculis pallidis; soris minutis in orbiculos congestis; sporis oblongis, obtuse apiculatis.

On leaves of *Viola palustris*. New Pitsligo, Rev. J. Fergusson.

This is very different from *P. violarum*, not only in the minute crowded sori, but in the elongated spores.

1466. *P. senecionis*, Libert, i. no. 92; Cd. fasc. iv. fig. 54.

On *Senecio aquatica*. Noran woods, Menmuir, Rev. M. Anderson.

1467. *P. tripolii*, B. & Br. Soris magnis; sporis elongatis, apice truncatis binodulosis, vel appendice crassa mammæformi præditis.

On leaves of *Aster tripolium*. New Pitsligo, Rev. J. Fergusson.

We have no authentic specimen of *P. asteris*, Schwein; but samples from different parts of the United States differ materially from the plant before us, of which, however, at present we have seen only a single specimen.

1468. *Coleosporium pingue*, Lév. Var. *alchemille*.

This appears not to be uncommon. The sori are crowded, and radiate from the base of the leaf. We have it from Scotland and Wales; and it occurs in Northamptonshire.

1469. *Æcidium incarcerationum*, B. & Br. Soris minutis, in orbes irregulares congestis; peridiis omnino in parenchymate foliorum inclusis; sparsis pallidis. Rab. Exs. no. 1492.

On leaves of *Sagittaria*. Bungay, Mr. Stocks.

The tissue of the peridium is far more delicate than in most of the species.

**Æ. berberidis*, P.

On leaves of *Mahonia*. Glamis, Rev. J. Stevenson.

Turning black when old. Some of the spores are embraced by the curved tips of the creeping mycelium, exactly after the manner of the supposed sexual phenomena in several Fungi.

**Æ. scrophulariæ*, De C.

On *Scrophularia nodosa*. Woods of Fearn, Rev. M. Anderson.

Very highly developed, looking like a little orange *Peziza* with an inflexed border. These specimens do not turn brown.

The above was written when we first received the plant from Mr. Anderson; but in subsequent specimens the sori of the *Æcidium* were surrounded with flat irregular dark specks, which on examination proved the following species of *Uromyces*, which has lately appeared in the 'Gardener's Chronicle' with a figure.

1470. *Uromyces concomitans*, B. & Br. Soris in annulum congestis irregularibus planis; sporis obovatis, lævibus; pedicellis deorsum attenuatis.

Surrounding *Æcidium scrophulariæ*. Woods of Noran and Fearn, Rev. M. Anderson.

1471. *Protomyces microsporus*, Ung. Maculis candidis sporis globosis, pallidis.

On leaves of *Ranunculus ficaria*. New Pitsligo, Rev. J. Fergusson.

On examining the specimens of *Cylindrosporium ficariæ* in Berkeley's 'British Fungi,' we find the same globose bodies, and therefore suppose that there must be some intimate connexion between the two. Dr. Farlow, on his late visit to this country, brought specimens from De Bary which seemed to be identical.

1472. *P. chrysosplenii*, B. & Br. Maculis albis crassiusculis; sporis globosis, hyalinis, pedicellatis.

On leaves of *Chrysosplenium oppositifolium*. New Pitsligo, Rev. J. Fergusson.

1473. *P. Fergussoni*, B. & Br. Maculis punctisve brunneis, irregularibus; sporis obovatis, primum hyalinis, brevissime pedicellatis, lævibus, dein fuscis.

On leaves of *Myosotis*. New Pitsligo, Rev. J. Fergusson.

These curious productions of very uncertain affinity are too

interesting to pass over, though further information is very desirable.

1474. *P. menyantes*, De By. Brandpilz. p. 19; Rab. Exs. no. 1500.

On leaves of *Menyanthes*. Bungay, Mr. Stocks. On *Comarum palustre*, Scotland.

1474 bis. *P. macrosporus*, Ung.

On leaves and stalks of *Æcopodium*. Rev. M. Anderson.

1475. *Myxotrichum ochraceum*, B. & Br. Flavum, dein virens; floccis sursum elongatis acutis, ramulis deflexis.

On the shavings of hurdle-makers. Hermitage Woods, St. Catherine's, Bath, March 1874.

Spores $\cdot 00015$ inch in diameter. When placed in alcohol they adhere in clusters as if surrounded by a membrane or involved in mucus.

In *M. æruginosum* the flocci are hamate (a character apparently overlooked by Montagne, whose specimens we have re-examined), in *M. deflexum* branched to the extremity. In this they project without any branchlets far beyond the common mass.

PLATE I. fig. 4. *a.* plant, slightly magnified; *b.* base of spines, forming a network; *c.* mass of spores; *d.* tip of spine; *e.* spores. All more or less highly magnified.

1476. *Gyromitra gigas*, Fr.

On the ground. Coed Coch, Mrs. Lloyd Wynne, March 1874. It has also occurred to Mr. Currey.

1477. *Vibrissea margarita*, White, Scott. Nat. ii. 1874, p. 218.

On wet wood. Perth, Dr. Buchanan White; Braemar Mor, Schron.

Distinguished by its very hairy stem.

1478. *Peziza* (Helvelloideæ) *cochleata*, β . *alutacea*, Fr.; Schæff. t. 150; Berg. t. 173.

Bowood, C. E. B.

1479. *P.* (Geopyxis) *ciborium*, Fr.

On the ground. C. Spencer Perceval.

The larger form, which seems quite different from the *Peziza* figured in 'Flora Danica.' There are a few brown mycelioid fibres at the base, while the earth above is filled with scattered patches of spawn. Sporidia $\cdot 001$ by $\cdot 0004$ – $\cdot 0005$ inch.

1480. *P.* (Humaria) *exidiiformis*, B. & Br. Orbicularis, luride purpurea; margine elevato inflexo; stipite sursum incrassato; sporidiis late ellipticis, binucleatis; hymenio cribroso.

On silver sand. Cork, Mr. D. Saunders, March 1873. On rotten wood, Stannage Park, C. E. B., March 1873.

Two lines or more wide. Contracting very much when dry. Paraphyses slightly clavate; sporidia $\cdot 0007$ inch long, $\cdot 0004$ wide.

1481. *P.* (*Humaria*) *fusispora*, B. Lond. Journ. Bot. 1846; var. *scotica*, Rabenh. Exsicc.

On heathy ground. Berwick, Dr. Johnstone; Menmuir, Rev. M. Anderson, Dec. 22, 1873. On turfy soil, New Pitsligo, Rev. J. Fergusson.

A very pretty species, varying from nearly white to orange or blood-red. Sporidia $\cdot 001$ – $\cdot 0012$ inch long, $\cdot 0005$ wide.

1482. *P.* (*Lachnea*) *brunneola*, Desm.

On oak-leaves, Mr. Phillips.

This is very probably the same as *P. fuscescens*, P. Desmazières says of his plant that the paraphyses are much longer than the asci, straight, fusiform, pointed, and as wide as the asci. In Mr. Phillips's plant, however, the width of the asci as compared with that of the paraphyses is not exactly the same. The question, perhaps, is whether it should not be referred to *Desmazierella*.

1483. *P.* (*Hymenoscyphæ*) *strobilina*, Fr.

On fir-cones, Scotland, where it appears to be common. The whole cone is sometimes covered with a floccose furfuraceous subiculum.

1484. *P.* (*Mollisia*) *rubella*, P.

On decayed wood with *P. vinosa*. New Pitsligo, Rev. J. Fergusson.

1485. *P.* (*Mollisia*) *Stevensoni*, B. & Br. Minuta; stipite brevissimo sursum incrassato; cupulis subglobosis, saccharinis; sporidiis minutis subcymbæformibus.

On decorticated wood. Glamis, Rev. J. Stevenson.

Minute, subglobose, sugar-coloured, externally minutely granular. Sporidia $\cdot 0005$ inch long. This is accompanied by white creeping threads, which give off erect branches bearing obovate spores $\cdot 001$ inch long. Probably a conidiiferous state.

1486. *Helotium tuba*, Fr., b. *ochracea*.

On a heap of decaying vegetables. Menmuir, Rev. M. Anderson, March 1874.

1487. *H. melleum*, B. & Br. Pallide melleum; stipite brevi cylindrico; cupulis planis flexuosis; margine elevato inflexo; ascis elongatis, lanceolatis; sporidiis biserialis, fusiformibus, uno latere curvulis, multinucleatis.

On rotten wood. New Pitsligo, Rev. J. Fergusson.

About a line broad; stem half as much high; sporidia $\cdot 0012$ inch long. Allied to *H. luteolum*.

1488. *H. sublateritium*, B. & Br. Pallide lateritium; stipite brevi cylindrico, subtiliter albo-villoso, glabrescente;

cupulis planis, subtus venosis; margine elevato; ascis linearibus; sporidiis uniseriatis, breviter fusiformibus, binucleatis.

On stems of herbaceous plants. Glamis, Rev. J. Stevenson.

Sporidia $\cdot 001$ inch long, one fifth as much wide in the centre.

1489. *Psilopezia myrothecioides*, B. & Br. Suborbicularis; margine laciniato tomentoso, pallide flavo; disco viridi-atro; ascis linearibus; sporidiis ellipticis, margine pellucidis.

On *Prunus padus*. New Pitsligo, Rev. J. Fergusson.

Sporidia $\cdot 0009$ inch long.

One of the most curious circumstances about this species is that some of the asci contain a very delicate spiral thread or line, a structure which Fuckel has observed in some other species.

PLATE II. fig. 5. *a.* plant, *in situ*, of the natural size; *b.* ditto, magnified; *c.* asci; *d.* tip of ascus; *e.* sporidia. All more or less highly magnified.

1490. *Patellaria Fergussoni*, B. & Br. Stipite brevi, sursum incrassato; cupulis planis, extus fuscis, granulosis; hymenio plano vel pulvinato luteo; ascis elongatis; sporidiis filiformibus; paraphysibus capite globoso.

On *Prunus padus*. New Pitsligo, Rev. J. Fergusson.

Sporidia $\cdot 009$ inch long.

PLATE II. fig. 6. *a.* ascus; *b.* sporidium; *c.* tip of paraphysis; *d.* cells of cup. All highly magnified.

1491. *Ascobolus consociatus*, B. & Br. Cupulis extus rugosis, granulatis, pallide flavis vel albidis; ascis clavatis brevibus; paraphysibus linearibus; sporidiis octonis biseriatis, late fusiformibus.

On the remains of *Sphaeria cupulifera*. Langridge, C. E. B., April 14, 1873.

Cups $\cdot 003$ – $\cdot 0105$ inch in diameter.

PLATE II. fig. 7. *a.* plant, *in situ*; *b.* single cup; *c.* ascus with paraphyses; *d.* sporidia. All more or less magnified.

1492. *Nectria citrino-aurantia*, Desm. Pl. Crypt. ser. 2, no. 778; Rab. Exs. no. 325.

On willow-twigs. Batheaston, Dec. 1873.

Densely caespitose; sporidia oblong, $\cdot 0003$ – $\cdot 00035$ inch long.

PLATE II. fig. 8. *a.*, *b.* plant, *in situ*; *c.* asci; *d.* sporidia. All more or less magnified.

1493. *Sphaeria* (*Villosæ*) *membranacea*, B. & Br. Semiimmersa; peritheciis amplis membranaceis, pilis brevibus flexibilibus tectis; sporidiis breviter fusiformibus uniseptatis.

On very rotten wood. Langridge, April 27, 1874, C. E. B. Walls composed of large cells; sporidia $\cdot 0015$ inch long, $\cdot 0007$ wide.

On the same wood with this species, and probably its stylo-sporous state, is a minute *Sphaeronema*, flask-shaped, with a long slender neck and minute globose spores.

PLATE II. fig. 9. *a.* plant, *in situ*; *b.* tissue of perithecia; *c.* ascus; *d.* sporidia. All more or less highly magnified.

**Venturia alchemilla*, B. & Br. Peritheciis minutis in maculas parvas stellatas congestis; ascis brevibus lanceolatis; sporidiis fusiformibus uniseptatis.

On leaves of *Alchemilla*, on which it appears in the form of little jet-black stellate spots. New Pitsligo, Rev. J. Ferguson, Dec. 31, 1873.

Sporidia shortly fusiform, narrow, $\cdot 0005$ inch long, uniseptate.

This is *Asteroma*, Grev., *Stigmatea*, Cooke; apparently owing its stellate appearance to the perithecia following the veins of the leaves. Fuckel's specimens have the characteristic short hairs.

**Dothidea betulina*, Fr.

Pycnidia of this species have been sent from the Rev. J. Stevenson, and very closely resemble those of *D. ulmi*, which have also been received from Scotland, and are equally referable to the genus *Piggotia*.

1494. *Hysterium arundinaceum*, Schr., var. *gramineum*; *H. culmigenum*, var. β , Fr. Syst. v. 2. p. 591; Moug. & Nest.

On leaves of grass. Torres, Rev. J. Keith.

This agrees exactly with *H. arundinaceum*, and is the plant of Mougeot and Nestler, and not with *H. culmigenum*, to which the specimen in Cooke's 'Exsiccata' belongs.

1495. *Mucor pruinosis*, B. & Br. Pusillus, niveus; vesiculis globosis, reticulatis; sporis irregularibus.

Covering with a thin white stratum the soil of garden-pots, the plants in which in consequence perished. Sibbertoft, Nov. 1873. Spores $\cdot 0007$ – $\cdot 0012$ inch long. Some decayed seeds of kidney-beans had been in the soil, and probably were the nidus of the mould.

1496. *Thamnidium Van Tieghemi*, B. & Br. *T. elegans*, Ann. d. Sc. Nat. sér. 5. v. xvii. p. 321.

On cabbage-stalks.

Clearly quite different from *T. elegans* (*Ascophora elegans*, Cd.), as a comparison of Van Tieghem's figure and Corda's

will at once show. *T. elegans* has occurred in this country on fowl's dung.

1497. *Agaricus* (*Collybia*) *Stevensoni*, B. & Br. Pileo semiovato, obtuso, viscido, pallide luteo hic illic e visco maculato; stipite tenui fibrilloso sursum pulverulento extus intusque rufulo radicato; lamellis latis adnatis, dente decurrentibus distantibus candidis.

Glamis, Rev. J. Stevenson, Aug. Pileus $\frac{1}{2}$ inch across and high; stem $1\frac{1}{2}$ inch high, scarce a line thick, composed of fibres.

Allied to *Ag. ventricosus*, but differing in its slender almost solid stem, viscid semiovate pileus, and very broad, adnate, somewhat ventricose plane gills.

1498. *Agaricus* (*Hypholoma*) *silaceus*, P.

Glamis, Rev. J. Stevenson.

Pileus viscid, bright orange rufous; stem 4 inches high, at length hollow, solid and slightly swollen at the base. Smell resembling that of meal. Spores pale purple-brown.

1499. *Cortinarius* (*Inoloma*) *traganus*, Fr., var. *fnitimus*, Weimm. p. 155.

Torres, Rev. J. Keith.

Smell not at all that of the typical form, but pleasant though peculiar, resembling that of gun just beginning to ferment. Pileus silky, at length smooth, lilac, as is the stem, which is yellowish and mottled within, but not saffron-coloured nor brown.

This peculiar form is the more interesting as it has not been met with in Sweden.

1500. *Eustegia arundinacea*, Fr. *Peziza Kneiffii*, Wallr.

New Pitsligo, Rev. J. Fergusson.

Quite different from a form of *Peziza fusca*, which is named in some herbaria *P. Kneiffii*.

[To be continued.]

III.—*Descriptions of two new Species of Crustacea from New Zealand.* By Captain F. W. HUTTON, C.M.Z.S.

Sesarma pentagona.

Carapace subquadrate, smooth, broader than long; anterior lateral margin with two teeth; front nearly vertical, with four rounded projections; lateral regions obliquely striated; a